What is claimed is:

1. An improved apparatus for forming sheet glass, wherein the apparatus includes a trough for receiving molten glass that has sides attached to a wedged shaped sheet forming structure that has downwardly sloping sides converging at the bottom of the wedge such that a glass sheet is formed when molten glass flows over the sides of the trough, down the downwardly sloping sides of the wedged shaped sheet forming structure and meets at the bottom of wedge, and wherein the improvement comprises:

   a) an overflow device on the trough that allows at least some of the molten glass within the trough to overflow the trough without flowing over the downwardly sloping sides of the wedged shaped sheet forming structure.

2. The improved apparatus for forming sheet glass of claim 1 wherein the improvement further comprises the top of the sides of the trough being substantially curved along their length.

3. The improved apparatus for forming sheet glass of claim 1 wherein the improvement further comprises the bottom of the trough being substantially curved or chamfered to reduce areas where the molten glass flows significantly slower than the average molten glass flow rate in the trough.

4. The apparatus for forming sheet glass of claim 1 wherein the improvement further comprises heating elements that can be used to differentially heat the molten glass as it is flowing to adjust for wedge or curvature irregularities within the sheet glass being formed by the apparatus.

5. An improved apparatus for forming sheet glass, wherein the apparatus includes a trough for receiving molten glass that has sides attached to a wedged shaped sheet forming structure that has downwardly sloping sides converging at the bottom of the wedge such that a glass sheet is formed when molten glass flows over the sides of the trough, down the downwardly sloping sides of the wedged shaped sheet forming structure and meets at the bottom of wedge, and wherein the improvement comprises:

a) substantially curved top sides of the trough such that a substantially uniform thickness glass sheet is formed when glass flows into the trough and over the sides of the trough.

6. The apparatus for forming sheet glass of claim 5 wherein the improvement further comprises heating elements that can be used to differentially heat the molten glass as it is flowing to adjust for wedge or curvature irregularities within the sheet glass being formed by the apparatus.

7. The improved apparatus for forming sheet glass of claim 5 wherein the improvement further comprises the bottom of the trough being substantially curved or chamfered to reduce areas where the molten glass flows significantly slower than the average molten glass flow rate in the trough.

8. An improved apparatus for forming sheet glass, wherein the apparatus includes an inflow pipe for delivering molten glass, a trough for receiving molten glass that has sides attached to a wedged shaped sheet forming structure that has downwardly sloping sides converging at the bottom of the wedge such that a glass sheet is formed when molten glass flows over the sides of the trough, down the downwardly sloping sides of the wedged shaped sheet forming structure and meets at the bottom of wedge, and wherein the improvement comprises:

a) an inflow pipe shaped to modify the way molten glass flows into the trough such that the molten glass has a more uniform time dependent flow throughout the trough relative to how molten glass would flow if it passed through a cylindrical pipe.

9. The improved apparatus for forming sheet glass of claim 8 wherein the improvement further comprises the top of the sides of the trough being substantially curved along their length.

10. The improved apparatus for forming sheet glass of claim 8 wherein the improvement further comprises the bottom of the trough being substantially curved or chamfered to reduce areas where the molten glass flows significantly slower than the average molten glass flow rate in the trough.

11. The improved apparatus for forming sheet glass of claim 8 wherein the improvement further comprises heating elements that can be used to differentially heat the molten glass as it is flowing to adjust for wedge or curvature irregularities within the sheet glass being formed by the apparatus.

12. The improved apparatus for forming sheet glass of claim 8 wherein the improvement further comprises an overflow device on the trough that allows at least some of the molten glass within the trough to overflow the trough without flowing over the downwardly sloping sides of the wedged shaped sheet forming structure.

13. An improved apparatus for forming sheet glass, wherein the apparatus includes a a trough for receiving molten glass that has sides attached to a wedged shaped sheet forming structure that has downwardly sloping sides converging at the bottom of the wedge such that a glass sheet is formed when molten glass flows over the sides of the trough, down the downwardly sloping sides of the wedged shaped sheet forming structure and meets at the bottom of wedge, and wherein the improvement comprises:

a) a flow control plug that can be inserted and adjusted within the trough to change at least one flow characteristic of the molten glass within the trough.

14. The improved apparatus for forming sheet glass of claim 13 wherein the improvement further comprises the top of the sides of the trough being substantially curved along their length.

15. The improved apparatus for forming sheet glass of claim 13 wherein the improvement further comprises the bottom of the trough being substantially curved or chamfered to reduce areas where the molten glass flows significantly slower than the average molten glass flow rate in the trough.

16. The improved apparatus for forming sheet glass of claim 13 wherein the improvement further comprises heating elements that can be used to differentially heat the molten glass as it is flowing to adjust for wedge or curvature irregularities

within the sheet glass being formed by the apparatus.

17. The apparatus for forming sheet glass of claim 13 wherein the improvement further comprises an overflow device on the trough that allows at least some of the molten glass within the trough to overflow the trough without flowing over the downwardly sloping sides of the wedged shaped sheet forming structure.

18. The apparatus for forming sheet glass of claim 13 wherein the improvement further comprises an inflow pipe shaped to modify the way molten glass flows into the trough such that the molten glass has a more uniform time dependent flow throughout the trough relative to how molten glass would flow if it passed through a cylindrical pipe.

19. An improved apparatus for forming sheet glass, wherein the apparatus includes a a trough for receiving molten glass that has sides attached to a wedged shaped sheet forming structure that has downwardly sloping sides converging at the bottom of the wedge such that a glass sheet is formed when molten glass flows over the sides of the trough, down the downwardly sloping sides of the wedged shaped sheet forming structure and meets at the bottom of wedge, and wherein the improvement comprises:

a) heating elements that can be used to differentially heat the molten glass as it is flowing to adjust for wedge or curvature irregularities within the sheet glass being formed by the apparatus.

20. An apparatus for forming sheet glass comprising:

a) an inflow pipe of appropriate structure for conveying molten glass under pressure;

b) a trough having sides and a top attached to the inflow pipe wherein the trough receives the molten glass;

c) an orifice running along the top of the trough such that as molten glass is conveyed to the trough the molten glass exits through the orifice and passes down the sides of the trough; and

d) a wedged shaped sheet forming structure attached to the trough and that has

downwardly sloping sides converging at the bottom of the structure to form the wedge shape such that a glass sheet of substantially uniform thickness is formed when molten glass flows down the downwardly sloping sides of the wedged shaped sheet forming structure and meets at the bottom of wedge.

21. The apparatus for forming sheet glass of claim 20 wherein the orifice is narrow along the top of the trough closest to the inflow pipe and widens for at least a portion of the length of the orifice further away from the inflow pipe such that as the glass loses static pressure as it flows to through the trough the widening orifice maintains a constant flow of glass along its length.

22. The apparatus for forming sheet glass of claim 20 further comprising a flow control plug that can be inserted and adjusted within the trough to change at least one flow characteristic of the molten glass within the trough.

23. The apparatus for forming sheet glass of claim 20 wherein the bottom of the trough is curved or chamfered to reduce areas where the molten glass flows significantly slower than the average molten glass flow rate in the trough.

24. The apparatus for forming sheet glass of claim 20 wherein the shape of the inflow pipe modifies the way molten glass flows into the trough such that the molten glass has a more uniform time dependent flow throughout the trough relative to how molten glass would flow if it passed through a cylindrically shape inflow pipe.

25. The apparatus for forming sheet glass of claim 20 further comprising heating elements that can be used to differentially heat the molten glass as it is flowing to adjust for wedge or curvature irregularities within the sheet glass being formed by the apparatus.

26. The apparatus for forming sheet glass of claim 20 further comprising an orifice in the bottom of the trough that allows molted glass to flow to the bottom of the wedge shaped forming apparatus such that molten glass is added to the middle of the glass sheet being formed by the molten glass flowing down the downwardly sloped sides of the wedge shaped forming apparatus.

27. The apparatus for forming sheet glass of claim 26 wherein the elements of the trough are held together with a glass seal such that adjustments in the shape of the trough or orifices may be made.

28. The apparatus for forming sheet glass of claim 26 wherein the top of the sides of the trough being substantially curved along their length.

29. The apparatus for forming sheet glass of claim 20 further comprising two orifices in the side of the trough that allows molten glass to flow to the downwardly sloped sides of the wedge shaped forming apparatus such that molten glass is added to the middle of the glass sheet being formed by the molten glass flowing down the downwardly sloped sides of the wedge shaped forming apparatus.

30. The apparatus for forming sheet glass of claim 29 wherein the elements of the trough are held together with a glass seal such that small adjustments in the shape of the trough or orifices may be made.

31. The apparatus for forming sheet glass of claim 22 further comprising heating elements that can be used to differentially heat the molten glass as it is flowing to adjust for wedge or curvature irregularities within the sheet glass being formed by the apparatus.

32. An improved method for forming sheet glass using an apparatus that includes a trough for receiving molten glass that has sides attached to a wedged shaped sheet forming structure that has downwardly sloping sides converging at the bottom of the wedge and forming such that a glass sheet is formed when molten glass flows over the sides of the trough, down the downwardly sloping sides of the wedged shaped sheet forming structure and meets at the bottom of wedge, wherein the improvement comprises:

a) providing an overflow device on the trough;

b) positioning the forming apparatus such that at least some of the molten glass within the trough passes out of the through the overflow device without flowing over the downwardly sloping sides of the wedged shaped

sheet forming structure; and

c) flowing molten glass into the trough such that a glass sheet of substantially uniform thickness is formed.

33. The improved method for forming sheet glass of claim 32 wherein the improvement further comprises adjusting both the tilt of the trough and the amount of molten glass passing through the overflow device.

34. An improved method for forming sheet glass using an apparatus that includes a trough for receiving molten glass that has sides attached to a wedged shaped sheet forming structure that has downwardly sloping sides converging at the bottom of the wedge and forming such that a glass sheet is formed when molten glass flows over the sides of the trough, down the downwardly sloping sides of the wedged shaped sheet forming structure and meets at the bottom of wedge, wherein the improvement comprises:

a) providing heating elements that can differentially head the molten glass as it flows; and

b) flowing molten glass into the trough and heating the molten glass differentially to adjust for wedge or curvature irregularities such that a glass sheet of substantially uniform thickness is formed.

35. An improved method for forming sheet glass using an apparatus that includes an inflow pipe for delivering molten glass, a trough for receiving molten glass that has sides attached to a wedged shaped sheet forming structure that has downwardly sloping sides converging at the bottom of the wedge such that a glass sheet is formed when molten glass flows over the sides of the trough, down the downwardly sloping sides of the wedged shaped sheet forming structure and meets at the bottom of wedge, and wherein the improvement comprises:

a) providing an inflow pipe shaped to modify the way molten glass flows into the trough such that the molten glass has a more uniform time dependent flow throughout the trough relative to how molten glass would flow if it passed through a cylindrical pipe providing an overflow device on the trough; and

b) flowing molten glass into the trough such that a glass sheet of substantially uniform thickness is formed..

36. An improved method for forming sheet glass using an apparatus that includes a trough for receiving molten glass that has sides attached to a wedged shaped sheet forming structure that has downwardly sloping sides converging at the bottom of the wedge such that a glass sheet is formed when molten glass flows over the sides of the trough, down the downwardly sloping sides of the wedged shaped sheet forming structure and meets at the bottom of wedge, and wherein the improvement comprises:

a) providing a flow control plug that can be inserted and adjusted within the trough;

b) using the flow control plug to adjust at least one flow characteristic of the molten glass within the trough; providing an overflow device on the trough; and

c) flowing molten glass into the trough such that a glass sheet of substantially uniform thickness is formed..

37. A method for forming sheet glass comprising:

a) providing an inflow pipe connected to a trough having sides and a top attached to the inflow pipe;

b) providing an orifice running along the top of the trough;

c) providing a wedged shaped sheet forming structure attached to the trough that has downwardly sloping sides converging at the bottom of the structure to form the wedge; and

d) conveying molten glass under pressure through the inflow pipe into the trough such that the molten glass exits through the orifice and flows down the sides of the trough and the downwardly sloping sides of the wedged shaped sheet forming structure and meets at the bottom of the wedge and forms a glass sheet of substantially uniform thickness.

38. The method for forming sheet glass of claim 37 wherein the orifice is narrow along the top of the trough closest to the inflow pipe and widens for at least a portion of

the length of the orifice further away from the inflow pipe such that as the glass loses static pressure as it flows through the trough a constant flow of glass is maintained along the length of the widening orifice.

39. The method for forming sheet glass of claim 37 further comprising providing a flow control plug that can be inserted and adjusted within the trough and using the flow control plug to change at least one flow characteristic of the molten glass within the trough.

40. The method for forming sheet glass of claim 37 wherein the shape of the inflow pipe modifies the way molten glass flows into the trough such that the molten glass has a more uniform time dependent flow throughout the trough relative to how molten glass would flow if it passed through a cylindrically shape inflow pipe.

41. The method for forming sheet glass claim 37 wherein the bottom of the trough is curved or chamfered to reduce areas where the molten glass flows significantly slower than the average molten glass flow rate in the trough.

42. The method for forming sheet glass claim 37 further comprising heating the molten glass differentially to adjust for wedge or curvature irregularities within the sheet glass being formed by the apparatus.

43. The method for forming sheet glass claim 37 further comprising providing an orifice in the bottom of the trough that allows molted glass to flow to the bottom of the wedge shaped forming apparatus such that molten glass is added to the middle of the glass sheet being formed by the molten glass flowing down the downwardly sloped sides of the wedge shaped forming apparatus.

44. The method for forming sheet glass of claim 43 wherein the elements of the trough are held together with a glass seal such that adjustments in the shape of the trough or orifices may be made.

45. The method for forming sheet glass of claim 37 further comprising providing two orifices in the side of the trough that allows molten glass to flow to the

downwardly sloped sides of the wedge shaped forming apparatus such that molten glass is added to the middle of the glass sheet being formed by the molten glass flowing down the downwardly sloped sides of the wedge shaped forming apparatus.

46. The method for forming sheet glass of claim 45 wherein the elements of the trough are held together with a glass seal such that small adjustments in the shape of the trough or orifices may be made.